## Television: ownership

How will you prevent one company dominating digital terrestrial television?

Companies will only be able to control three of the six multiplexes available. The Bill allows for this to be altered if more multiplexes become available.

Broadcasters will be subject to the 15% audience threshold. At the beginning, however, this will not bite. We have therefore introduced a points system based on the number of programme services, restricting an individual broadcaster to around 25% of services other than simulcasts.

Why isn't the control on digital capacity, as proposed in August

When we considered this in detail, it became clear that it would be very difficult and bureaucratic to establish and monitor. Dealing with programme services is much simpler and clearer.

## Digital audio broadcasting (DAB)

Why have you allocated the seventh radio multiplex for local services?

Although the arguments are finely balanced, we have decided that it is sensible to increase the capacity available for local DAB in those areas where demand is likely to be greatest. The national independent multiplex will already double the number of national stations, and there may be more frequency available in the future to increase this if there is a demand.

Which local areas will benefit?

That depends on demand, and it will be for the Radio Authority to decide where it will be appropriate to advertise two local multiplex licences. But the obvious candidates are the urban areas - for example, London, Glasgow, Edinburgh, Swassea, Cardiff, Birmingham and Manchester.

### Why can't all areas benefit?

Because frequency constraints and interference problems mean that there must be gaps between areas where the multiplex is used.

Why aren't you requiring 100% simulcasts of the national stations, like television?

We have not changed the guarantees to the three national stations, so they don't have the extra flexibility being offered to television. We therefore think it is sensible to let them have some flexibility within the simulcast arrangements to offer some new programming, to make it more attractive to listeners to invest in DAB receivers.

What will be the arrangements for the national multiplex?

Assuming the three INR stations wish to take up their guarantees, the Radio Authority will invite applications for the licence and proposals for broadcasting on the rest of the multiplex. They will award the licence on the basis of three criteria: investment in infrastructure; investment in promotion; and variety. They will ensure that the chosen multiplex provider provides its service on fair, reasonable and non-discriminatory terms to the three guarantee place holders.

Why are you restricting companies to one national station?

There will only be one multiplex available for independent national services, providing six stations. We want to ensure plurality and diversity whilst the number of stations available is limited. The Bill provides for this control to be relaxed if more stations become available in the future.

Why are you now allowing companies to run two local DAB stations in a local area?

The allocation of the seventh multiplex means more capacity in some areas, and in those areas a company will be able to have two DAB stations, on the same multiplex or one on each multiplex. In other areas, where there will be only one multiplex, we will allow a company to run two DAB stations provided there is the opportunity for at least one new broadcaster to get on the multiplex. This will mean that a company currently broadcasting an AM and an FM station may have the chance to broadcast both on DAB.

### What happens to BBC local services?

The BBC and the Radio Authority will agree what capacity should be reserved for BBC local services before a local multiplex licence is advertised. The chosen multiplex provider will have to offer the BBC its service on fair and reasonable terms.

Will there be a restriction on the number of radio multiplexes a company can provide?

A company will be able to hold one national multiplex licence and any number of local multiplex licences.

Why are you letting the INR stations roll their licences?

We recognise that the INR stations need greater security on analogue if they are to invest in DAB. If they take up their guarantees, they will therefore be able to renew their analogue licences. This will apply only once, in recognition of the investment needed to start DAB broadcasting. This will be introduced as an amendment to the Bill.

Why aren't you giving guarantees to local DAB stations?

There isn't sufficient capacity to do so. But we also intend to let local stations roll their licences if they are part of a successful local multiplex application. This will be introduced as an amendment to the Bill.

## Multiplexing

When will multiplex providers have to make payments to the Exchequer?

Not until the second licence period. We have decided that it would be a deterrent to investment to require such payments in the start-up phase. But it is only fair that, when their operations are becoming profitable, they should pay for the use of the spectrum.

What will these payments be based on?

They will be a percentage of the revenue earned from the use of the spectrum - income from advertising, sponsorship, subscription or pay-per-view.

How will the percentage be set?

It will be set by the regulator in the light of their knowledge of the way the market has developed.

Will all multiplex providers have to pay?

From the second licence period, all television and national radio multiplex providers may be required to pay. There will be no payments in respect of local DAB multiplexes at any time.

How many television multiplex licences will one company be able to control?

A company will be able to hold three multiplex licences, or two if it is providing the BBC's multiplex, which will not need an ITC licence.

Why have you increased the number from two to three?

There are economies of scale to be realised if a single company is able to roll-out infrastructure for more than one multiplex. The opportunity to provide three multiplexes makes digital terrestrial television a better business proposition, whilst ensuring some competition in provision.

Wouldn't it be better to have a single multiplex provider as a regulated monopoly?

We see no need to create a monopoly where one is not inevitable. Competition will be in the interests of broadcasters and the viewer, ensuring variety and keeping costs of set-top boxes and pay-TV down.

Why are you allowing multiplex licences to be renewed?

We are asking companies to make significant levels of investment in a risky venture which will produce returns in the long rather than the short term. By allowing licence holders to roll their licences once, we are recognising the reality of this new market.

## **Analogue Switch-off**

When will analogue frequencies be switched off?

That will depend upon the success of digital terrestrial television, and in particular the take-up of set-top boxes or digital sets. We can only switch off frequencies when people are able to receive digital broadcasts.

When will you set a date?

We will review the position 5 years into the first licence period or when 50% of homes have digital terrestrial sets or set-top boxes, whichever is the sooner.

How long do you think it will be before you can switch off analogue?

We cannot set a date until we know how the market is developing. The changes made to the proposals following consultation are all designed to increase the chances of success for digital terrestrial broadcasting. This in turn will bring forward the time when we can release spectrum for other use.

Won't lots of people be deprived of their favourite programmes when you switch off analogue?

No. There will be no switch off until digital broadcasts are available to roughly the same proportion of the population now able to receive analogue.

What will the spectrum be used for?

It is much too early to say. Some might be allocated for more digital broadcasting, particularly to increase coverage of existing multiplexes, some for other uses. The decision will be for the Government of the day.

# DIGITAL BROADCASTING: GENERAL

Will people need new TV sets?

People will continue to be able to receive on their existing sets all the programmes they currently receive. To get the digital channels as well, viewers will need either a set top box or a new set in order to receive digital services.

How much will the set top boxes/new sets costs?

We expect the market to begin largely with set top boxes. "All digital" sets are likely at first to be limited to widescreen models at four figure prices. Set top boxes could be between £300 and £500. A European standard has been drawn up with a guideline price of £375. Prices will come down as production increases, just as they did for colour TV, CD players and microwaves. But the Government's proposals encourage measures to reduce that cost further.

Will people need new radios?

To receive digital services, yes, but not to receive what they receive now. Digital car radios will be no more expensive than current car radios, once production reaches a substantial level. Digital receivers in hi-fi equipment are also likely to cost about the same as current high-quality receivers.

Why should people buy digital terrestrial television and radios?

They will be able to get more television channels and radio stations, giving more variety and choice. They will be able to receive existing and new services at a very high technical quality, with widescreen television and CD-quality radio. And there will be other pluses - home shopping, interactive services and improved teletext and education services.

Will viewers and listeners have to pay to receive the new terrestrial television and radio channels?

The existing BBC, ITV and Channel 4 services won't cost the viewer anything. Some new channels may be funded by advertising, others will be financed by subscription or "pay-per-view". The BBC has indicated that it plans new free-to-air services.

When will digital terrestrial broadcasting start?

The BBC began digital radio broadcasting in September. Television will come later, probably towards the end of 1997. Digital cable and satellite will probably be available earlier.

Will the set top box also allow the viewer to receive digital cable and satellite broadcasts?

It should be possible to develop and market a combined set top box allowing the viewer to receive digital programmes whatever the means of transmission. That is an issue for the industry and the market, though it would obviously be in viewers' interests if such a combined box were produced and commercial pressure might well deliver it.

Will people need new aerials to receive digital terrestrial television and radio?

Nearly everybody will be able to use existing aerials, though some might need to be adjusted.

Only 4 million homes have bought into analogue cable and satellite. What makes you think people will be interested by this new technology?

If new technology brings benefits they want, people will buy it, especially as prices fall. There are numerous precedents. The obvious example is colour television. In 1970, 2 per cent of households had colour TVs. By 1987, it was 90 per cent.

## DIGITAL TERRESTRIAL TELEVISION

Is terrestrial television the Government's preferred medium? What about cable and satellite?

How many channels will be available on digital terrestrial television?

Won't digital cable and satellite television have capacity for even more programme channels?

How can terrestrial digital television compete with cable and satellite if they will have more channels?

Only the UK has term plans to adopt digital terrestrial television. Aren't we too small to go it alone and won't this lead to excessive consumer prices?

No medium is "preferred". The Government welcomes the move to digital in cable and satellite, too. But in those areas, the regulatory framework is in place. We now need one for digital terrestrial. That is what these proposals are for.

There will be at least 18-20 television channels overall, including the simulcasts, and covering most of the UK. But because digital offers broadcasters the potential to split channels, there may at times be double that number, or even more. In some areas, further frequency channels with more local coverage may become available.

Yes. Satellite may have capacity for up to 200 channels and cable even more. These may be used to provide near video on demand services rather than conventional television channels.

Digital terrestrial will have certain advantages. It will use existing aerials and won't require a satellite dish or expensive cabling. It will be more easily suited to portable reception. It allows regional programmes and reaches places not easily or cheaply accessible to cable or satellite. And the existing terrestrial channels command the vast majority of the TV audience. We expect these channels to be available on digital terrestrial and our proposals allow for that. But it will be for viewers to decide which mode of transmission they prefer. quality and variety of programmes will be the vital factor.

No. There are benefits as well as risks in being out in from. And European standards are being drawn up with many common elements with cable and satellite digital technology. This will drive down component prices. And export markets will open up, outside as well as inside Europe.

Do we need all these new channels? What will prevent more channels of rubbish?

The viewing public does not want to watch rubbish. And the ITC will ensure that there is a variety of television channels, in addition to those provided by existing broadcasters on guaranteed places. Licensing will also ensure standards of taste and decency.

How will you ensure that new channels do not provide unacceptable services, for example pornography?

Digital television will be subject to the same taste and decency standards as analogue ones. If those are not respected, offenders will lose their licences.

Will digital terrestrial television be able to provide interactive services?

Digital terrestrial TV will be able to provide a limited degree of interactivity, through a telephone return path which manufacturers may incorporate in the set-top box

What about High Definition Television (HDTV)?

High definition will be facilitated by the flexibility allowed by digital, though exactly what form digital HDTV will take us uncertain. The technology is developing rapidly and picture definition can also be raised at the receiver as well as through broadcasting a high-definition signal.

Why guarantee channels to existing broadcasters when there are enough available to ensure diversity?

For many years to come, terrestrial services will be the only ones going into virtually every home, whether on analogue or digital. Viewers investing in digital will want the chance to see the programmes they know and like through the new medium. And positive steps are needed to ensure variety.

Does the new BBC Charter allow the BBC to participate in digital?

Yes. The new Charter gives the BBC the necessary flexibility.

Will digital terrestrial television offer widescreen services?

Digital technology will allow excellent quality widescreen services. The broadcasters see this as a major advantage of digital.

#### MULTIPLEXING

The proposals lay heavy stress on the role of the multiplex provider. What is a multiplex?

In digital broadcasting, multiplexing is an essential function, allowing several television channels to be combined on a single frequency channel. The multiplex provider will perform this function. The alternative would be to allocate whole multiplexes to single broadcasters and to limit the number of broadcasters to six. That would not maximise diversity.

What else will the multiplex provider do, once it has been allocated a frequency channel?

The multiplex provider will manage the process of developing a transmission network to maximise geographical coverage. It will also act as an intermediary between the broadcasters. It may well also play a role in promoting its broadcasters and perhaps in organising subscription management arrangements for them.

What's in it for the multiplex provider?

The provider will secure a return from commercial contracts with broadcasters and with providers of additional services on its multiplex.

Who is likely to bid to provide multiplexes?

We are aware of interest from various quarters, and we have placed no restrictions on who can hold a multiplex licence. Various telecommunications, broadcasting or electronics organisations may well be interested. Applicants will come forward if they judge that there is a commercial opportunity. Our proposals are designed to allow them to make that judgement, not make it for them.

Can a broadcaster be a multiplexer?

Yes.

Would a privatised BBC Transmission be able to be a multiplex provider?

Privatisation allows BBC Transmission to compete for third party transmission contracts, including digital multiplex provision.

Will non-EU companies be allowed to bid to be multiplex providers?

Yes. The Government wishes to encourage investment from any source with the technical and commercial expertise to transmit terrestrial broadcasting.

What sanctions will be available against multiplex providers who break their licence conditions?

The ITC will have the power to fine multiplex providers, or if necessary to shorten or revoke licences.

Why not just allocate the frequency channels direct to broadcasters?

Too few companies would control broadcasting and transmission. Competition and variety would be limited and smaller broadcasters unable to finance a whole multiplex would be excluded. In the past, frequency channels have been allocated to single broadcasters because each channel represented the capacity to provide one television channel. But with digital technology, that is no longer the case.

#### **BROADCASTERS**

But broadcasters can bid to be multiplex providers?

Yes. But Multiplex licences will require them not to discriminate against other broadcasters. And they will need to offer a variety of services to be successful, which may well involve joining with other broadcasters rather than providing all the services themselves. Our proposals allow smaller prospective broadcasters, who could not bid for a whole multiplex, to enter the market.

Who do you expect to be broadcasters?

We very much hope existing broadcasters will accept their guaranteed places. We hope too that new entrants will come forward. It is not for me to name names. Companies will come forward if they judge that there is a commercial opportunity. Our proposals are intended to allow them to make that judgement not to make it for them.

## Who will make the programmes?

Broadcasters themselves and independent producers. Licence conditions will require, in line with EU regulations, that 10% of programmes are made by independent producers and that broadcasters, wherepracticable, include in their programming service a majority of material of European origin.

Will digital television allow regional programming?

Yes. That will be an important attraction. There will be scope for regional opt-outs and there may even be whole additional multiplexes available in some regions. And our proposals for simulcasting require that existing broadcasters should simulcast regional as well as national services.

Will everybody who can receive analogue services be able to receive digital terrestrial ones, if they buy the relevant equipment? The coverage of the six frequency channels which are expected to be available is likely to vary from about 70% of the population to over 95%, once multiplex providers have further developed their infrastructure. In the longer term, it is hoped that technical developments and further frequency planning might increase that coverage.

What parts of the country will not be able to receive digital television?

Some parts of the country will be able to receive transmissions on some frequency channels and not others. The details of coverage will only become available once frequencies are finalised, probably in early 1996.

What does variety mean? How will the ITC ensure it?

Variety means the overall mix of programme services offered by digital terrestrial television. The number of channels available will increase but will still be limited. It is important to ensure that the viewer is offered choice and diversity within that limited number of channels. The ITC will ensure variety by using it as one of the three criteria on which bids from multiplex operators will be judged.

Will party political broadcasts be shown on digital channels?

Yes, on the simulcast channels.

# Will there be safeguards against editorial bias and political advertising?

Will you ensure that News at Ten continues to be at ten on digital terrestrial television?

Yes. Just as there are for Channel 3 and 5 and for cable and satellite services.

The requirement to simulcast will ensure that news provision on digital terrestrial television duplicates that on analogue.

#### **CHANNEL 4/S4C**

How do you expect Channel 4 to finance entry into digital terrestrial television?

Channel 4 will need to finance it from existing resources. The revision to the funding formula will help.

How do you expect S4C to fund entry into digital terrestrial television?

For its guaranteed place in Wales, from existing resources. Like the BBC and Channel 4, if it wishes to provide further services, it will need to participate in joint ventures.

#### **ADDITIONAL SERVICES**

What kind of additional data services do you expect to be available on broadcasting frequencies?

Possibilities include "super teletext" services business information services, and home shopping. The market will determine which services take off.

Won't additional services crowd out television services?

No. The Bill provides for a limit of 10% on the amount of capacity on any multiplex to be allocated to additional services.

How will you ensure that additional services respect taste and decency norms?

They will need licences in the same way as broadcasters and the same sanctions will be available should licence conditions be breached.

#### **CONDITIONAL ACCESS**

What is conditional access?

Why have you let broadcasters also be conditional access providers? That creates scope for unfair competition.

Why is there nothing on conditional access in the Bill?

So what are you doing to implement the EC Television Standards Directive?

What about digital satellite and cable conditional access? The Directive affects them too.

What about analogue satellite? It is in this existing market that there have been allegations of unfair competition made against a monopoly provider. It is the means by which pay-TV services are encrypted so that only those who pay have access to them. It covers both the encryption technology and the subscription management operation.

We do not want to discourage investment in conditional access technology, from whatever source. That would reduce the prospects of a competitive market emerging. But I recognise that we must take steps to prevent unfair competition in this field. That is why we are proposing that conditional access providers for digital terrestrial television should be subject to licence conditions binding them to treat all broadcasters fairly.

We do not need to take powers in the Bill to introduce licensing under the Telecommunications Act. As we intend to do this in pursuance of an EC Directive, we can take appropriate measures under the European Community Act 1972.

The Government intends to implement the Directive, as it does all European legislation. My Department is discussing with DTI and with regulators the details of how this will work.

The Government will be implementing the Directive consistently across all modes of transmission. But the issue is currently under discussion and detailed proposals will be brought forward in due course.

The Directive does not affect analogue satellite. But the Government is committed to a vigorous response to proven anti-competitive behaviour in this field as in others.

Do you expect new entrants into the market for conditional access services?

That will be for the relevant companies to decide. But broadcasters, multiplex providers and others might wish to join together to develop new systems.

Can they challenge Murdoch's dominance?

The market will decide that. Our licensing proposals for digital terrestrial conditional access will help ensure that the market operates fairly and openly and that dominant positions are not abused.

Why is conditional access to be licensed by DTI/OFTEL and not ITC?

OFTEL already regulates Telecommunications Act licences and conditional access providers will in any case need such a licence. But the ITC will have an important role to play, as the policy document makes clear. My Department is currently discussing with DTI and the regulators the detailed arrangements for licensing and regulation of conditional access.

#### **DIGITAL TERRESTRIAL RADIO**

Why are you giving guaranteed places to commercial broadcasters? They are not public service broadcasters and capacity for independent national radio on digital will be limited.

We want people to buy digital radio receivers. The existing broadcasters will be a major attraction and they are likely to be in a position to start up services early. In addition, if it were to prove possible in due course to switch off analogue, existing national broadcasters would need to be available on digital.

When will independent radio be able to go digital?

As soon as licences can be allotted to multiplex providers and broadcasters. Just as for independent television, that will need legislation.

## What about community radio?

The Government values the role of community radio and wants it to have access to digital capacity in the same way as other radio stations. Community stations can therefore be part of any local multiplex bid. Multiplex providers will also be expected to make space for restricted service licences, where that can be done without an adverse effect on the technical quality of other services. And, of course if analogue frequencies can be released there will be more space here for community radio.

When will you be able to turn off analogue radio frequencies?

Particularly for local radio, this will probably take longer than for television. The Government hopes it will be possible eventually, but the issue is complicated for radio. Digital will not initially have such a high coverage as television. Analogue will not be turned off until the vast majority of people have digital radios and can receive digital broadcasts in their areas.

How quickly can the market for digital radio take off? Do car manufacturers have plans to include digital receivers?

We expect small chip sets needed for mass market in-car systems to be available in the near future. Ford and Rover have expressed an interest in installing them in their cars, but no firm plans.